
From: Helder, Dirk
To: allison.castellan@noaa.gov; Carvalho, Gabriela
CC: Wu, Jennifer; Henning, Alan; Peterson, Erik; Woodruff, Leigh; Liu, Linda; Carlin, Jayne; Waye, Don; Fleming, Sheila; Allen, Elizabeth
Sent: 8/13/2014 6:47:17 PM
Subject: RE: Pls. review: Pesticides draft rationale for OR CZARA

Jennifer,

I agree Gabriella had some good suggestions. I also think Oregon should focus their efforts on better outreach and training of aerial applicators. Applicators have to attend training every year to maintain their license. The state could develop some aerial applicator guidelines and training and outreach materials which would likely be the most effective approach to reduce drift and subsequent human exposure and deposition into water bodies. The pesticide label will only go so far to protect the environment and bystanders and the forestry applications are pretty unique to this part of the country. Oregon has special conditions and also has information that the labels aren't adequate to protect bystanders and some water bodies. This is exactly the kind of situation that annual aerial applicator training could address. So, here are a few ideals that I figured I'd share with others for their input and edits.

DH

- State specific aerial application recommendations or guidelines for drift control of pesticides;
- Annual applicator training, guidance and outreach for aerial applicators on how to reduce drift;
- The application guidelines and aerial applicator training should address such things as:
 - Application of pesticides as close to the crop canopy and at the slowest air speed that is safe for flight;
 - Applications when wind speed is between 1-10 mph;
 - Applications when wind is blowing away from sensitive sites or structures;
 - Calibration of nozzles and repair of leaks;
 - Correct nozzle selection, angle of release and placement on wingspan;
 - Use of largest droplet size possible to ensure crop coverage;
 - Use of drift reducing adjuvants;
 - Use of spray shields;
 - Evaluation of local meteorological conditions to evaluate most appropriate times of year, time of day or windows when weather patterns are conducive to effective aerial applications;
 - Use of mapping and GPS to automatically shut off nozzles when crossing N-type streams and other sensitive sites;
 - Notification of bystanders, homes and businesses in close proximity to aerial applications.

From: Allison Castellan - NOAA Federal [mailto:allison.castellan@noaa.gov]
Sent: Wednesday, August 13, 2014 2:54 PM
To: Carvalho, Gabriela
Cc: Wu, Jennifer; Henning, Alan; Peterson, Erik; Helder, Dirk; Woodruff, Leigh; Liu, Linda; Carlin, Jayne; Waye, Don; Fleming, Sheila; Allen, Elizabeth
Subject: Re: Pls. review: Pesticides draft rationale for OR CZARA

Hi Jenny--

Thanks again for putting together this rationale. Pesticides is a very tricky issue and I think you did a good job getting all of the main points across. Like I mentioned earlier, I agree with Gabriela that we may want to consider reorganizing some of these pieces so that the rationale would be more impactful and very clear about the points we want to make. For example:

1. moving the science discussion of why we think an add MM is needed up to the front;
2. making sure the scientific findings we cite have an explicit connection to the points we want to support in our rationale (i.e., that aerial spraying of herbicides around non-fish streams is bad and causes water quality and designated use impacts); and
3. making sure we're very clear on why we do not believe Oregon has met this element and what they need to do to be approved.

Also, like Jayne and Gabriel mentioned, I do not think the rationale is the place to summarize public comment. We have the Response to Comment document to do that and there is no need for us to repeat ourselves twice. In my mind, the rationale should just focus on why we arrived at the decision we did.

I've added some comments to the version Jayne commented on to provide some additional insight into my thinking (see Pesticides 8 11 14 JC Cmts_ac). I've also taken a stab at reorganizing the info to illustrate how it could be reordered (see Pesticides Rationale 8.11.14_ac reorged). However, you'll see that I left holes for the science discussion since I didn't feel like I was familiar enough with those studies to insert.

Let me know if you have any questions. Happy to discuss.

Allison

On Wed, Aug 13, 2014 at 1:22 PM, Carvalho, Gabriela <Carvalho.gabriela@epa.gov> wrote:
Hello Jennifer and all,

There are a lot of moving parts affecting how we think about this issue. I think Jennifer has done a good job of capturing all of the different elements. I'd like to propose we simplify the paper but I don't have a good grasp of how this section fits in with all of the other sections of the document to know how best to do so.

Here is an outline of how the rationale is currently written:

1. EPA says OR forest practice rules do not protect Type N streams
2. OR states what regulations they have in place to protect Type N streams
3. EPA/NOAA received comments on draft CZARA decision document
4. Description of EPA's pesticide registration risk assessment process – aerial application 10 ft. vs 70 ft from canopy cover

5. **Ex. 5 - Deliberative**

- 6.
7. Ongoing federal efforts to protect endangered species
8. Studies on herbicide spray drift – detections occurred, but below thresholds of concern
9. Hwy 36 case study – effects on Type N streams (results?)
10. Hwy 36 exposure investigation – no herbicides found in drinking water samples
11. OR's Water Quality Pesticide Management Plan and ongoing state efforts to adaptively manage detections
12. Original basis for disapproval – inadequate riparian buffers for application of herbicides on non-fish bearing streams (does not say why the buffers are inadequate)

13. OR should develop targeted studies to evaluate effectiveness of BMPs

14. OR should update Pesticide Management Plan to include buffers on Type N streams, application drift control measures, public notification of spraying, etc.

I am not clear what components we absolutely need in this document. Can we cut the summary of public comments received assuming that responses will be in a “response to comment” document? Do we need to summarize the full history of this issue?

To simplify our rationale, I suggest we go with something like this:

1. EPA and NOAA agree that OR’s forest practice rules do not protect Type N streams because...
2. OR is doing a lot through its Pesticide Management Plan, but it is not enough because...

Ex. 5 - Deliberative

4. Unique OR forest landscapes require more protections than FIFRA labels account for. We recommend the state implement additional protections such as....

I’m free to meet this week if anyone want to talk through this rationale.

Gabriela

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From: Wu, Jennifer

Sent: Tuesday, August 12, 2014 12:21 PM

To: Henning, Alan; Peterson, Erik; Helder, Dirk; Woodruff, Leigh; Liu, Linda; allison.castellan@noaa.gov; Carlin, Jayne; Wayne, Don; Carvalho, Gabriela

Cc: Fleming, Sheila; Allen, Elizabeth

Subject: Pls. review: Pesticides draft rationale for OR CZARA

Hi Everyone,

Thanks very much for your comments on the Pesticides Issue Paper. I’m working to incorporate the comments and information I got from people and will be sending this out later this week early next week, FYI. The briefing for management is on August 20.

The attachment above is the draft rationale for the pesticides in forestry issue for OR CZARA. This is probably the most important piece to review, since this is what’s published as the basis for our decision on pesticides. It’s also the basis for what the issue paper is based on, so collectively describes what we plan to do, what we looked at, and what our determination is. If you’re going to look at anything, this is the document to look at! If you can get me comments by Monday, August 18, I’d really appreciate it.

And for what’s ahead, I’ll be wrapping up response to comments shortly, so that should be the last piece for everyone to review. Let me know if you have questions, and thanks again.

Jenny Wu

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